DESCRIPTION

In the design of this pursuit aeroplane the main object is to get the maximum possible speed and climb obtainable with a given power, useful load and minimum speed, coupled with good stability, maneuverability and visibility.

It seems to me that some new combination must be conceived that is better than the new "Fokker" twin engine pursuit. That aeroplane I believe is about the best yet. It has about everything desired; twin motor reliability, no torque, simplicity in construction, maximum protection for the pilot and excellant visibility, except the excess weight due to using 2 motors in place of one.

In the "Schult" Flying Wing" it is hoped to have all the desirable features of a pursuit aeroplane.

The wing is standard design all metal dural structure with 2 spars and ribs covered with alclad or plywood. The latter preferred since it has a smoother contour so desirable for maximum all around performance.

Its wing curve "Schult #1" is stable, varying in thickness and chord as desired.

In the center of the wing is mounted an "Allison W 24" *2400 H.P. motor.

* Assumed Power

DESCRIPTION

This motor drives two 3 bladed pusher propellers by the use of extension shafts and gears. This combination gives good over all efficiency, eliminates torque and leaves the forward part of the wing clear for the pilot guns and miscellaneous equipment.

A tricycle retractable landing is incorporated with the main wheels retracting inward into the wing. The nose wheel folds back into the forward part of the wing beneath the pilot.

To control the aeroplane about all three axis it is desirable to have only a control column. This is accomplished thru the use of split differential ailerons.

For elevating or descending the control stick is moved back and forth in the conventional manner. Rolling about the fore and aft axis is also obtain by a lateral movement of the control stick as in the conventional aeroplane. Yawing is produced by moving the control stick diagonally from its neutral position. This latter movement of the control stick separates the upper & lower aileron surfaces about the wing tip it is desired to turn, thus producing a yawing moment about the vertical axis.

ANALYSIS General		PAGE 3
ENGINEER Wm F. Schult		MODEL S-11
DATE 7/22/40		REPORT NO.

15

DESCRIPTION

The cooling system is a core radiator built inside the wing.

The fuel system consists of two 100 gallon tanks built into the wing and one 40 gallon auxiliary tank in back of the pilot.

An oil tank of 18 gallons capacity and oil radiator is located to the right of the pilot in the lower portion of the wing.

Two .50 caliber guns are mounted adjacent and on each side of the pilot. Two .30 caliber guns are mounted in the leading edge of the wing each about 4'-6" from ℄ of aeroplane.

Directly in front of the pilot is located a cannon.

All other equipment located conveniently about cockpit.